



TORQ Analysis of Computer Support Specialists to Desktop Publishers

INPUT SECTION:

Transfer	Title	O* NET	Filters		
From Title:	Computer Support Specialists	15-1041.00	Abilities:	Importance Level: 50	Weight: 1
To Title:	Desktop Publishers	43-9031.00	Skills:	Importance Level: 69	Weight: 1
Labor Market Area:	Maine Statewide		Knowledge:	Importance Level: 69	Weight: 1

OUTPUT SECTION:

Grand TORQ:

86

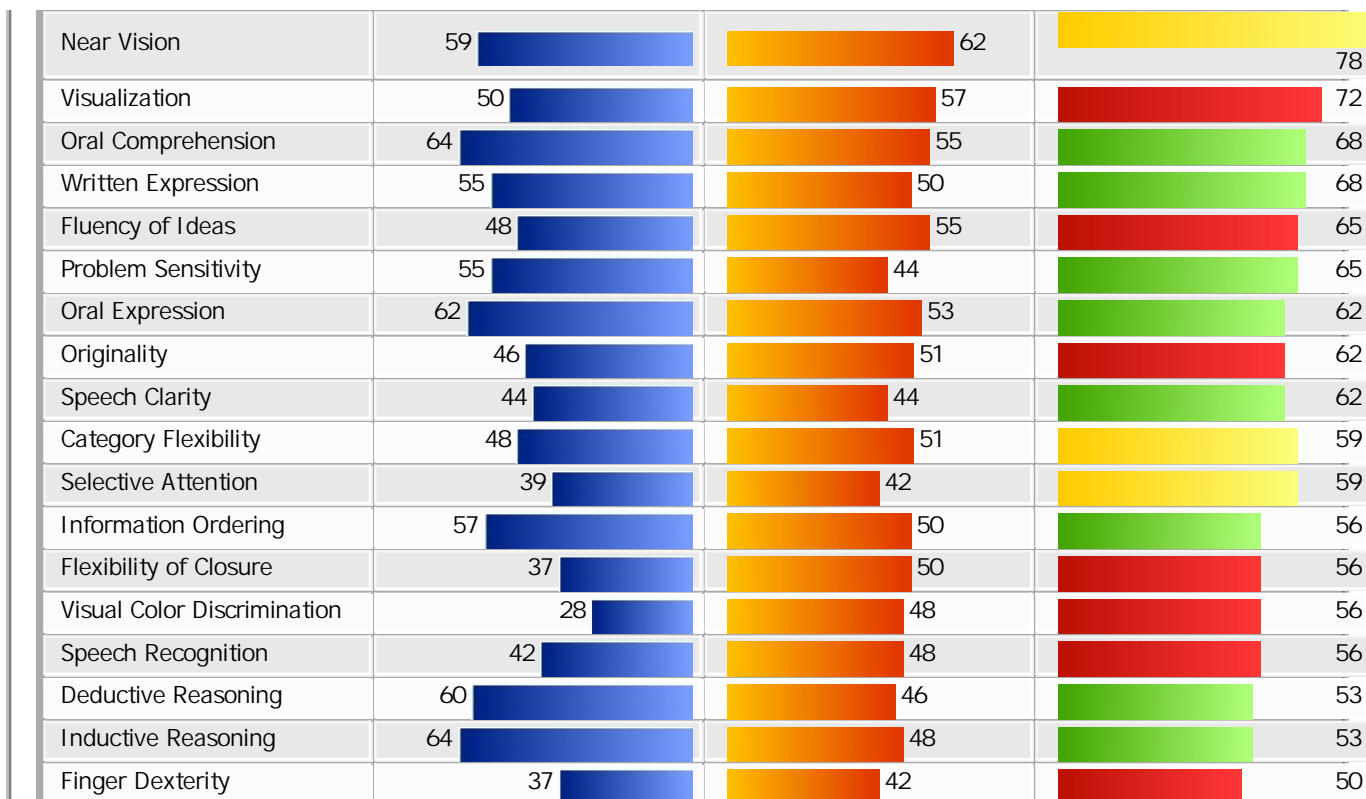
Ability TORQ				Skills TORQ				Knowledge TORQ			
Level			87	Level			83	Level			87
Gaps To Narrow if Possible				Upgrade These Skills				Knowledge to Add			
Ability	Level	Gap	Impt	Skill	Level	Gap	Impt	Knowledge	Level	Gap	Impt
Visual Color Discrimination	48	20	56	No Skills Upgrade Required!				No Knowledge Upgrades Required!			
Flexibility of Closure	50	13	56								
Visualization	57	7	72								
Fluency of Ideas	55	7	65								
Speech Recognition	48	6	56								
Originality	51	5	62								
Finger Dexterity	42	5	50								
Near Vision	62	3	78								
Category Flexibility	51	3	59								
Selective Attention	42	3	59								

LEVEL and IMPT (IMPORTANCE) refer to the Target Desktop Publishers. GAP refers to level difference between Computer Support Specialists and Desktop Publishers.

ASK ANALYSIS

Ability Level Comparison - Abilities with importance scores over 50

Description	Computer Support Specialists	Desktop Publishers	Importance
Written Comprehension	69	51	81



Skill Level Comparison - Abilities with importance scores over 69

Description	Computer Support Specialists	Desktop Publishers	Importance
Active Listening	66	65	78
Reading Comprehension	70	66	72

Knowledge Level Comparison - Knowledge with importance scores over 69

Description	Computer Support Specialists	Desktop Publishers	Importance
Computers and Electronics	70	65	69

Experience & Education Comparison

Related Work Experience Comparison			Required Education Level Comparison		
Description	Computer Support Specialists	Desktop Publishers	Description	Computer Support Specialists	Desktop Publishers
10+ years	0%	0%	Doctoral	0%	0%
8-10 years	0%	0%	Professional Degree	0%	0%
6-8 years	0%	0%	Post-Masters Cert	0%	0%
4-6 years	0%	32%	Master's Degree	0%	0%
2-4 years	85%	11%	Post-Bachelor Cert	0%	0%
1-2 years	9%	33%	Bachelors	24%	4%
6-12 months	1%	15%	AA or Equiv	5%	0%
3-6 months	0%	1%	Some College	1%	26%
1-3 months	0%	3%	Post-Secondary Certificate	69%	16%
0-1 month	0%	0%			



None	1%	1%	High School Diploma or GED	0%	51%
			No HSD or GED	0%	0%
Computer Support Specialists			Desktop Publishers		
Most Common Educational/Training Requirement:					
Associate degree			Postsecondary vocational award		
Job Zone Comparison					
3 - Job Zone Three: Medium Preparation Needed			3 - Job Zone Three: Medium Preparation Needed		
Previous work-related skill, knowledge, or experience is required for these occupations. For example, an electrician must have completed three or four years of apprenticeship or several years of vocational training, and often must have passed a licensing exam, in order to perform the job.			Previous work-related skill, knowledge, or experience is required for these occupations. For example, an electrician must have completed three or four years of apprenticeship or several years of vocational training, and often must have passed a licensing exam, in order to perform the job.		
Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree. Some may require a bachelor's degree.			Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree. Some may require a bachelor's degree.		
Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers.			Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers.		

Tasks

Computer Support Specialists	Desktop Publishers
Core Tasks	Core Tasks
Generalized Work Activities:	Generalized Work Activities:
<ul style="list-style-type: none"> Interacting With Computers - Using computers and computer systems (including hardware and software) to program, write software, set up functions, enter data, or process information. Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources. Updating and Using Relevant Knowledge - Keeping up-to-date technically and applying new knowledge to your job. Making Decisions and Solving Problems - Analyzing information and evaluating results to choose the best solution and solve problems. Communicating with Persons Outside Organization - Communicating with people outside the organization, representing the organization to customers, the public, government, and other external sources. This information can be exchanged in person, in writing, or by telephone or e-mail. 	<ul style="list-style-type: none"> Interacting With Computers - Using computers and computer systems (including hardware and software) to program, write software, set up functions, enter data, or process information. Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources. Thinking Creatively - Developing, designing, or creating new applications, ideas, relationships, systems, or products, including artistic contributions. Updating and Using Relevant Knowledge - Keeping up-to-date technically and applying new knowledge to your job. Organizing, Planning, and Prioritizing Work - Developing specific goals and plans to prioritize, organize, and accomplish your work.
Specific Tasks	Specific Tasks
Occupation Specific Tasks:	Occupation Specific Tasks:
<ul style="list-style-type: none"> Answer user inquiries regarding computer software or hardware operation to resolve problems. Conduct office automation feasibility studies, including workflow analysis, space design, or cost comparison analysis. Confer with staff, users, and management to establish requirements 	<ul style="list-style-type: none"> Check preliminary and final proofs for errors and make necessary corrections. Collaborate with graphic artists, editors and writers to produce master copies according to design specifications. Convert various types of files for printing or for the Internet, using computer software. Create special effects such as vignettes, mosaics, and image combining, and add elements such as sound and animation to



for new systems or modifications.

- Develop training materials and procedures, or train users in the proper use of hardware or software.
- Enter commands and observe system functioning to verify correct operations and detect errors.
- Inspect equipment and read order sheets to prepare for delivery to users.
- Install and perform minor repairs to hardware, software, or peripheral equipment, following design or installation specifications.
- Maintain records of daily data communication transactions, problems and remedial actions taken, or installation activities.
- Modify and customize commercial programs for internal needs.
- Oversee the daily performance of computer systems.
- Prepare evaluations of software or hardware, and recommend improvements or upgrades.
- Read technical manuals, confer with users, or conduct computer diagnostics to investigate and resolve problems or to provide technical assistance and support.
- Read trade magazines and technical manuals, or attend conferences and seminars to maintain knowledge of hardware and software.
- Refer major hardware or software problems or defective products to vendors or technicians for service.
- Set up equipment for employee use, performing or ensuring proper installation of cables, operating systems, or appropriate software.
- Supervise and coordinate workers engaged in problem-solving, monitoring, and installing data communication equipment and software.

Detailed Tasks

Detailed Work Activities:

- adjust computer operation system
- assist co-workers with software problems
- communicate technical information
- conduct computer diagnostics to determine nature of problems
- conduct training for personnel
- configure computers in industrial or manufacturing setting
- consult with staff or users to identify operating procedure problems
- evaluate computer system user requests or requirements
- evaluate prototype computer software systems
- follow data security procedures

Desktop Publishing

- Edit graphics and photos using pixel or bitmap editing, airbrushing, masking, or image retouching.
- Enter data, such as coordinates of images and color specifications, into system to retouch and make color corrections.
- Enter digitized data into electronic prepress system computer memory, using scanner, camera, keyboard, or mouse.
- Enter text into computer keyboard and select the size and style of type, column width and appropriate spacing for printed materials.
- Import text and art elements such as electronic clip-art or electronic files from photographs that have been scanned or produced with a digital camera, using computer software.
- Load floppy disks or tapes containing information into system.
- Operate desktop publishing software and equipment to design, lay out, and produce camera-ready copy.
- Position text and art elements from a variety of databases in a visually appealing way to design print or web pages, using knowledge of type styles and size and layout patterns.
- Prepare sample layouts for approval, using computer software.
- Select number of colors and determine color separations.
- Store copies of publications on paper, magnetic tape, film or diskette.
- Study layout or other design instructions to determine work to be done and sequence of operations.
- Transmit, deliver or mail publication master to printer for production into film and plates.
- View monitors for visual representation of work in progress and for instructions and feedback throughout process, making modifications as necessary.

Detailed Tasks

Detailed Work Activities:

- achieve special camera effects
- create art from ideas
- design advertising layouts
- develop new office forms
- develop tables depicting data
- distinguish details in graphic arts material
- identify color or balance
- inspect manufactured products or materials
- load tapes, disks or paper into computers or peripherals
- operate cameras
- operate scanner



- follow data storage procedures
- identify appropriate software for project
- install computer programs
- install hardware, software, or peripheral equipment
- maintain or repair computers or related equipment
- monitor computer operation
- monitor operating conditions
- perform minor repairs to hardware, software, or peripheral equipment
- program computers using existing software
- provide technical computer training
- provide technical support to computer users
- recommend purchase or repair of furnishings or equipment
- recommend software or hardware purchases
- select business applications for computers
- select software for clerical activities
- test computer programs or systems
- train workers in use of computer and related equipment
- train workers in use of equipment
- understand computer equipment operating manuals
- use computer networking technology
- use computers to enter, access or retrieve data
- use desktop publishing software
- use geographical information system (GIS) software
- use interpersonal communication techniques
- use knowledge of mainframe computers
- use relational database software
- use spreadsheet software
- use word processing or desktop publishing software
- write computer software, programs, or code

Technology - Examples

Access software

- Mac HelpMate

Administration software

- Element management software
- SolarWinds software

Authentication server software

- Password management software

Backup or archival software

- paste up materials to be printed
- prepare artwork for camera or press
- proofread printed or written material
- read technical drawings
- read work order, instructions, formulas, or processing charts
- select materials or tools
- set page layout or composition
- use computer graphics design software
- use computers to enter, access or retrieve data
- use desktop publishing software
- use graphic arts techniques
- use knowledge of paper characteristics in publishing or printing processes
- use word processing or desktop publishing software

Technology - Examples

Charting software

- Microsoft Office Visio

Data conversion software

- AlgoLab Raster to Vector Conversion Toolkit

- Data conversion software

- GTX RastorCAD

- Portable document file creation software

- Potrace software

- Trix TracTrix

Desktop publishing software

- Adobe Systems Adobe FrameMaker

- Adobe Systems Adobe InDesign

- Adobe Systems Adobe PageMaker

- AT&T Troff

- Corel Ventura

- Desktop publishing software

- GrassHopper PageStream

- LaTeX software

- Microsoft Publisher

- PagePlus SE software

- Passepartout software

- Pattern Stream software



- Backup and archival software

- Disaster recovery software

- Microsoft Volume Shadow Copy Service

- Symantec LiveState

Calendar and scheduling software

- Calendar and scheduling software

Configuration management software

- Automated installation software

- Configuration management software

- Deployment software

- Patch management software

Data base management system software

- Database management software

Data base user interface and query software

- Database software

- Software asset management SAM software

Desktop communications software

- CrossTec NetOp Remote Control

- Remote control software

- Stac Software ReachOut

- Symantec pcAnywhere

Desktop publishing software

- Adobe Systems Adobe Distiller

Electronic mail software

- Email software

Filesystem software

- Desktop partitioning software

- Symantec Norton Utilities

Helpdesk or call center software

- Call center software

- Help desk software

Information retrieval or search software

- Information systems integration software

Internet browser software

- Internet browser software

Internet directory services software

- Active directory software

- QuarkXpress

- Scribus software

Development environment software

- Adobe Systems Adobe PostScript

- Extensible markup language XML

- Microsoft Visual Basic

- Scalable vector graphics SVG

Document management software

- Adobe Systems Adobe Acrobat software

- Color management software

Graphics card driver software

- Graphics card driver software

Graphics or photo imaging software

- Adobe Systems Adobe Freehand

- Adobe Systems Adobe Illustrator

- Adobe Systems Adobe LiveMotion

- Adobe Systems Adobe Photoshop software

- Apple iPhoto

- Canon software

- CodedColor software

- Corel CorelDraw Graphics Suite

- Corel Paint Shop Pro

- Corel Photo-Paint

- GNU image manipulation program GIMP software

- Graphics software

- Inkscape software

- iView MultiMedia software

- Microsoft Picture It!

- Raster Graphics software

- Ulead PhotoImpact

- Vector Software

- Xara X

Information retrieval or search software

- Online image and graphics database software



- Domain name system DNS software

- Network directory services software

License management software

- License management software

Network monitoring software

- DartaWare InterMapper

Network operation system software

- Remote install server software

Operating system software

- Event log monitor software

- Microsoft Windows Pre-installation Environment

- Operating system monitoring software

- Personal computer diagnostic software

Platform interconnectivity software

- Migration software

Presentation software

- Presentation software

Program testing software

- Defect tracking software

Spreadsheet software

- Spreadsheet software

Storage networking software

- Media storage management software

Transaction security and virus protection software

- Encryption software

- Virus scanning software

Word processing software

- Word processing software

Tools - Examples

- Computer tool kits

- Desktop computers

- MS-DOS-bootable disks

- Redundant array of independent disks RAID systems

- Mainframe computers

- Network analyzers

Internet browser software

- Internet browser software

Object or component oriented development software

- Sun Microsystems Java

Office suite software

- OpenOffice.org

Operating system software

- Apple AppleScript

Optical character reader OCR or scanning software

- Corel CorelScan

- Corel OCR-Trace 8

- Nuance OmniPage Professional

- PANTONE ColorVision ProfilerPlus

Presentation software

- Microsoft PowerPoint

Printer driver software

- Printer driver software

Spell checkers

- Spelling and grammar checking software

Spreadsheet software

- Microsoft Excel

Video creation and editing software

- Corel WebDraw

Web page creation and editing software

- Actuate DocBook

- Adobe Systems Adobe Dreamweaver

- Adobe Systems Adobe Flash Player

Web platform development software

- Cascading Style Sheets CSS

- Hypertext markup language HTML

- JavaScript

Word processing software

- Corel WordPerfect software

- Microsoft Word

Tools - Examples

- Desktop computers



- Notebook computers
- Personal digital assistants PDA
- Power meters
- Punchdown tools
- Reflectometers
- Screwdrivers
- Digital tapes
- Wire crimpers

- Pen tablets
- Laser printers
- Notebook computers
- Scanners

Labor Market Comparison

Description	Computer Support Specialists	Desktop Publishers	Difference
Median Wage	\$ 40,200	\$ 32,200	\$(8,000)
10th Percentile Wage	\$ 27,070	\$ 25,640	\$(1,430)
25th Percentile Wage	N/A	N/A	N/A
75th Percentile Wage	\$ 47,830	\$ 37,710	\$(10,120)
90th Percentile Wage	\$ 55,380	\$ 44,040	\$(11,340)
Mean Wage	\$ 40,600	\$ 33,360	\$(7,240)
Total Employment - 2007	1,670	130	-1,540
Employment Base - 2006	1,690	137	-1,553
Projected Employment - 2016	1,778	156	-1,622
Projected Job Growth - 2006-2016	5.2 %	13.9 %	8.7 %
Projected Annual Openings - 2006-2016	61	5	-56

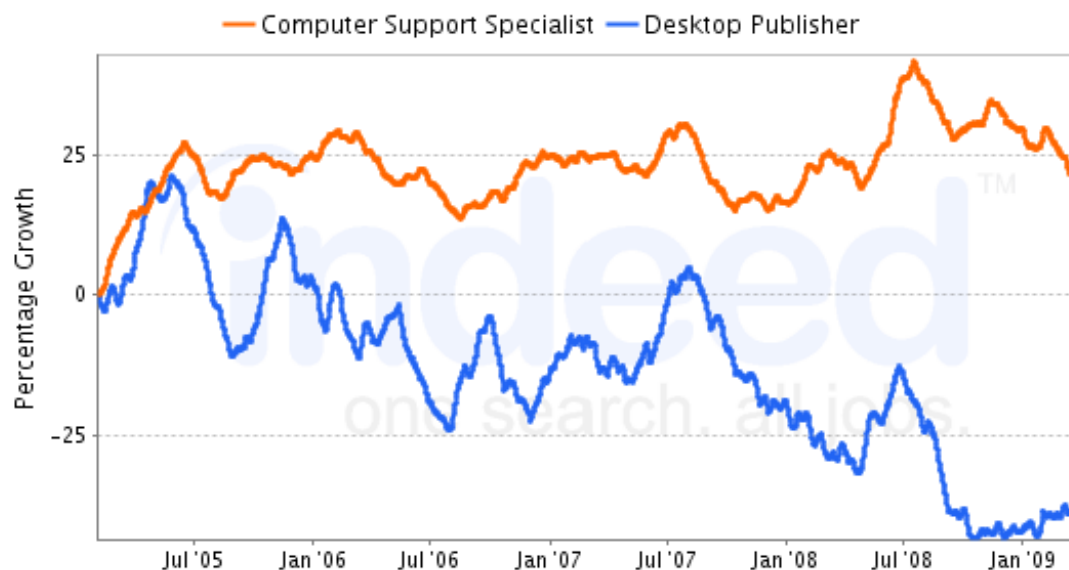
National Job Posting Trends

Trend for Computer Support Specialists

Trend for
Desktop
Publishers



Job Trends from Indeed.com



Data from [Indeed](http://Indeed.com)

Recommended Programs

Prepress/Desktop Publishing and Digital Imaging Design

Prepress/Desktop Publishing and Digital Imaging Design. A program that prepares individuals to apply technical knowledge and skills to the layout, design and typographic arrangement of printed and/or electronic graphic and textual products. Includes instruction in printing and lithographic equipment and operations; computer hardware and software; digital imaging; print preparation; page layout and design; desktop publishing; and applicable principles of graphic design and web page design.

No schools available for the program

Maine Statewide Promotion Opportunities for Computer Support Specialists

O*NET Code	Title	Grand TORQ	Job Zone	Employment	Median Wage	Difference	Growth	Annual Job Openings
15-1041.00	Computer Support Specialists	100	3	1,670	\$40,200.00	\$0.00	5%	61
27-3042.00	Technical Writers	85	4	50	\$46,060.00	\$5,860.00	-8%	2
17-3012.01	Electronic Drafters	82	3	90	\$44,860.00	\$4,660.00	-16%	3
15-1051.00	Computer Systems Analysts	82	4	1,650	\$69,340.00	\$29,140.00	20%	78
15-1071.00	Network and Computer Systems Administrators	81	4	1,070	\$57,690.00	\$17,490.00	18%	44
13-2053.00	Insurance Underwriters	81	3	460	\$56,090.00	\$15,890.00	-1%	12
15-1021.00	Computer Programmers	81	4	720	\$58,240.00	\$18,040.00	-12%	16



17-3023.03	Electrical Engineering Technicians	81	3	430	\$45,180.00	\$4,980.00	-20%	9
13-1071.01	Employment Interviewers	80	3	610	\$41,200.00	\$1,000.00	10%	19
25-1021.00	Computer Science Teachers, Postsecondary	80	5	120	\$52,380.00	\$12,180.00	14%	4
13-1031.01	Claims Examiners, Property and Casualty Insurance	80	3	1,570	\$49,360.00	\$9,160.00	3%	44
13-1032.00	Insurance Appraisers, Auto Damage	80	3	40	\$49,950.00	\$9,750.00	5%	1
15-1061.00	Database Administrators	80	4	300	\$60,260.00	\$20,060.00	20%	11
13-1023.00	Purchasing Agents, Except Wholesale, Retail, and Farm Products	79	3	920	\$45,210.00	\$5,010.00	-2%	21
23-2011.00	Paralegals and Legal Assistants	79	3	1,010	\$40,260.00	\$60.00	15%	30

Top Industries for Desktop Publishers

Industry	NAICS	% in Industry	Employment	Projected Employment	% Change
Printing and related support activities	323100	24.00%	7,638	6,052	-20.77%
Newspaper publishers	511110	11.44%	3,642	3,120	-14.33%
Management of companies and enterprises	551100	4.37%	1,390	1,603	15.28%
Advertising and related services	541800	2.52%	802	905	12.83%
Self-employed workers, secondary job	000602	2.17%	692	689	-0.45%
Specialized design services	541400	2.09%	666	891	33.81%
Colleges, universities, and professional schools, public and private	611300	1.68%	535	598	11.87%
Religious organizations	813100	1.41%	449	538	20.01%
Computer systems design and related services	541500	1.32%	419	566	35.02%
Office supplies, stationery, and gift stores	453200	1.10%	349	288	-17.50%
Local government, excluding education and hospitals	939300	0.96%	306	344	12.34%
Employment services	561300	0.80%	254	322	26.56%
Management, scientific, and technical consulting services	541600	0.77%	244	435	78.53%



Software publishers	511200	0.68%	217	279	28.76%
Internet publishing and broadcasting	516100	0.61%	194	272	40.33%

Top Industries for Computer Support Specialists

Industry	NAICS	% in Industry	Employment	Projected Employment	% Change
Computer systems design and related services	541500	15.54%	85,860	104,333	21.51%
Colleges, universities, and professional schools, public and private	611300	5.81%	32,072	35,880	11.87%
Elementary and secondary schools, public and private	611100	5.16%	28,526	30,060	5.38%
Management of companies and enterprises	551100	4.54%	25,054	28,882	15.28%
Software publishers	511200	3.79%	20,951	24,278	15.88%
Employment services	561300	2.98%	16,453	20,824	26.56%
Local government, excluding education and hospitals	939300	2.89%	15,984	17,956	12.34%
Professional and commercial equipment and supplies merchant wholesalers	423400	2.58%	14,246	14,946	4.91%
Federal government, excluding postal service	919999	2.56%	14,152	13,378	-5.47%
Electronics and appliance stores	443100	2.09%	11,573	10,577	-8.61%
State government, excluding education and hospitals	929200	2.06%	11,375	11,162	-1.87%
Internet service providers and Web search portals	518100	1.98%	10,935	7,752	-29.11%
General medical and surgical hospitals, public and private	622100	1.92%	10,607	11,743	10.71%
Management, scientific, and technical consulting services	541600	1.88%	10,402	18,571	78.52%
Depository credit intermediation	522100	1.84%	10,158	10,357	1.95%